

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A diaphragm valve ~~in which a diaphragm valve element airtightly closes open ends of a first flow passage and a second flow passage on an upper surface of a body, the diaphragm valve which is closed when the diaphragm valve element is pressed against a valve seat by urging force of an urging member, and is opened when the diaphragm valve element is separated from the valve seat by an actuator,~~
~~wherein the diaphragm valve element comprises a main body in contact with the valve seat, a diaphragm part extending outwards from the main body, and a fixed part formed at a peripheral edge of the diaphragm part, and a root of the diaphragm part formed in the main body is positioned inside a diameter of the valve seat and lower than the peripheral edge of the diaphragm part which extends in a curve in a valve closed state.~~

comprising:

a body having an upper opening;

a first flow passage and a second flow passage formed in the body to open into the upper opening;

a diaphragm valve element covering the upper opening to form an airtight space through which the first and second flow passages are allowed to communicate with each other;

a valve seat formed in the body;

an urging member urging the diaphragm valve element against the valve seat into a valve-closed state; and

an actuator adapted to bring the diaphragm valve element out of contact with the valve seat into a valve-opened state;

wherein the diaphragm valve element comprising:
a main body which is to be brought into/out of contact with the valve seat;
a diaphragm part formed extending in a curve, radially from the main body and
including a root connected to the main body and positioned inside the diameter of the valve
seat; and
a fixed part formed at an outer peripheral edge of the diaphragm part and held at a
position higher than the root during the valve-closed state.

2. (Original) The diaphragm valve according to claim 1,

wherein the diaphragm valve element in which the diaphragm part having a thin wall and the fixed part having a thick wall are formed so that respective upper surfaces are flush with each other, and the fixed part is held between an a lower fixing face and an upper fixing face which extends to the diaphragm part.

3. (Original) The diaphragm valve according to claim 2,

wherein a guide face having a slope contiguous from the upper fixing face above the diaphragm part so that the diaphragm part comes into contact with the guide face when the diaphragm valve element is separated from the valve seat.

4. (Currently Amended) The diaphragm valve according to ~~any one of claims 1 to 3,~~

a fluid-pressure-receiving area of the valve body part is as large as or larger than a fluid-pressure-applied area of the diaphragm part.

5. (New) The diaphragm valve according to claim 2,
the fluid-pressure-receiving area of the valve body part is as large as or larger than a
fluid-pressure-applied area of the diaphragm part.
6. (New) The diaphragm valve according to claim 3,
the fluid-pressure-receiving area of the valve body part is as large as or larger than a
fluid-pressure-applied area of the diaphragm part.